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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,134	02/28/2002	Dana Le	12587-018001	4392
26212	7590	08/09/2005	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			CHANG, YEAN HSI	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PA

Office Action Summary	Application No.	Applicant(s)	
	10/087,134	LE ET AL.	
	Examiner	Art Unit	
	Yean-Hsi Chang	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-16 and 23-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-16 and 23-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Kishida et al. (US 2002/0015008 A1).

Kishida teaches a wearable computer system (figs. 1 and 2) comprising: a computer unit (1, fig. 2B) wearable by a user, a human-machine interface (25 and 26) having an audio-only mode of operation, comprising: an audio receiver (25) wearable by the user and connectable to the computer unit (shown in fig. 2B), a speaker (26) adapted to be worn by the user and connectable to the computer unit (shown in fig. 2B) (claim 1); and an image recorder (602, fig. 15) adapted to be worn by the user and connectable to the computer unit such that the image recorder may capture an image and forward the image to the computer unit for storage (see page 5, paragraph [0075]) (claim 7).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishida et al. in view of Anderson (US 5,721,783).

Kishida discloses the claimed invention except an earpiece housing the audio receiver and the speaker.

Anderson teaches an earpiece (10, fig. 1) housing an audio receiver (12, fig. 1) and a speaker (15, fig. 1) and being hidden in the ear canal.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Kishida with the earpiece taught by Anderson so that both the audio receiver and the speaker can be hidden in the ear canal for a natural appearance.

5. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kishida in view of Sakurai (US 4,825,384).

The wearable computer system taught by Kishida comprising also a processor (411), a computer memory (412), and a control section 27 which recognizes a voice signal input from microphone 25 by a user (see [0045], [0061] and [0062] for details)

except a second audio receiver and a filter that filters audio signals received by the audio receiver that do not originate with the user.

Sakurai teaches a speech recognizer (1, fig. 2) comprising a filter (113) that filters audio signals received by the audio receiver that do not originate with the user by using a second audio receiver (22) as explained in cols. 1-2.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Kishida with the recognizer taught by Sakurai for describing recognition functions in detail.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishida et al. in view of Abbott et al. (US 2002/0087525 A1).

Kishida discloses the claimed invention except the computer unit including a GPS sensor.

Abbott teaches a wearable computer unit (106, fig. 2) comprising a GPS sensor (164, fig. 2; also see page 2, paragraph [0029]) for providing information of locations.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Kishida with the GPS sensor taught by Abbott for providing information of locations.

7. Claims 10-11 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kishida et al. in view of Sakurai.

Kishida teaches a wearable computer system (figs. 1-2) comprising: a computer unit (1) wearable by a user, a human-machine interface (25 and 26) having an audio-only mode of operation, comprising: a first audio receiver (25) wearable by the user and connectable to the computer unit (shown in fig. 2B) (claim 10); a speaker (26) adapted to be worn by the user and connectable to the computer unit (shown in fig. 2B) (claim 11); a processor (411, fig. 7) and a computer memory (412) (claim 13); wherein the voice command that is received by the computer unit is a natural voice command spoken by the user (see fig. 2B) that blends with the natural phrases and terminology commonly spoken by the user (the microphone may not be removed when not giving a command) (claim 14); and an image recorder (602, fig. 15) adapted to be worn by the user and connectable to the computer unit such that the image recorder may capture an image and forward the image to the computer unit for storage (see page 5, paragraph [0075]) (claim 15).

Kishida fails to teach a second audio receiver and a filter that filters audio signals received by the audio receiver that do not originate with the user.

Sakurai teaches a speech recognizer (1, fig. 2) comprising a filter (113) that filters audio signals received by the audio receiver that do not originate with the user by using a second audio receiver (22) as explained in cols. 1-2.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Kishida with the recognizer taught by Sakurai for describing recognition functions in detail.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishida et al. in view of Sakurai, further in view of Anderson.

Kishida et al. in view of Sakurai discloses the claimed invention except an earpiece housing the audio receiver and the speaker.

Anderson teaches an earpiece (10, fig. 1) housing an audio receiver (12, fig. 1) and a speaker (15, fig. 1) and being hidden in the ear canal.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Kishida in view of Sakurai with the earpiece taught by Anderson so that both the audio receiver and the speaker can be hidden in the ear canal for a natural appearance.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kishida et al. in view of Sakurai, further in view of Abbott et al.

Kishida et al. in view of Sakurai discloses the claimed invention except the computer unit including a GPS sensor.

Abbott teaches a wearable computer unit (106, fig. 2) comprising a GPS sensor (164, fig. 2; also see page 2, paragraph [0029]) for providing information of locations.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Kishida in view of Sakurai with the GPS sensor taught by Abbott for providing information of locations.

10. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abbott et al. in view of Mills et al. (US 5,012,814).

Abbott teaches a method of operating a wearable computer system (106, fig. 2) comprising a computer unit (166) wearable by a user, and a human-machine interface (for example, 152) with an audio-only mode of operation (a microphone is an audio-only mode of operation device), comprising: continuously storing in a storage device (172, fig. 2; [0025] states that the information being maintaining and updating is a scrolling buffer function) audio information received by a microphone (164) that receives ambient audio information at the user's location (see [0029]), upon receiving a predetermined voice command from the user, storing in memory audio information present in the buffer for some period of time in relation to the time the audio command was received, so that the audio information store in memory may be retrieved at a later time (see [0025], CDOS maintains and updates user environment) (claim 23); wherein the audio information stored in memory for later retrieval is received during a predetermined period of time immediately preceding and/or after receipt of the predetermined voice command (it is the function of a scrolling buffer; the voice command may be set up by the user, also see [0026]) (claims 24-28).

Abbott fails to teach the storage device being a scrolling buffer.

Mills teaches a storage RAM 16 may be used as a scrolling buffer for storing input signals (see col. 6, lines 7-25). Upon receiving a TRIGGER command, information in the scrolling buffer will be stored for later retrieval and new scrolling buffer will be allocated.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Abbott by the scrolling buffer taught by Mills so that useful information is captured and memory space will not be wasted.

Response to Arguments

11. Applicant points out that claims 24-26 are not shown detail of rejections in the office action mailed 3/29/05, therefore, this second Non-Final action is given.

12. Applicant's arguments filed 7/28/05 have been fully considered but they are not persuasive. Regarding claims 1, 10 and 23, Applicant's amendments show the claimed computer system "comprising a human machine interface having an audio-only mode of operation" that do not exclude the system from comprising a second human machine interface, and said human machine interface may have a non-audio-only mode of operation, and that do not agree with what discussed in the interview on 5/17/05.

Therefore, the rejection of the claims based on the given prior art as stated hereinabove, still stands.

Correspondence

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-

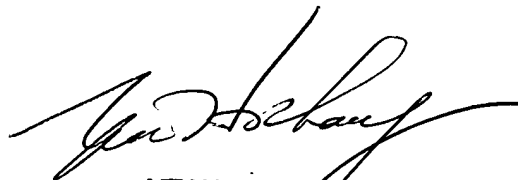
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2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang
Primary Examiner
Art Unit: 2835
August 8, 2005



YEAN-HSI CHANG
PRIMARY EXAMINER